LISTING OF CLAIMS

No amendments to the claims are made in this paper. For the convenience of the Applicants and the Examiner, a complete listing of the claims in their current form is provided below.

1. (Previously Presented) A virtualizing microarray system, the system comprising:

(a)   a microarray comprising:

(i)   a number of features, each feature containing a type of probe molecule designed to bind a target molecule; and

(ii)   a memory element physically associated with the microarray, wherein the memory element comprises data that describes each feature of the microarray; and

(b)   logic that controls a microarray processing component to generate a virtual microarray comprising data describing a subset of the features of the microarray.

2. (Previously Presented) The virtualizing microarray system of claim 1 wherein the data describing a feature of the microarray comprises:

data that identifies a position of the feature within the microarray;

data that identifies the type of probe molecules contained in the feature; and

data that describes the target molecule of the probe molecules contained in the feature.

3. (Previously Presented) The virtualizing microarray system of claim 2 wherein the data that describes the target molecule of the probe molecules contained in the feature comprises:

data that describes an immediate target molecule to which the probe molecules bind.

4. (Previously Presented)   The virtualizing microarray system of claim 2 wherein the data that describes the target molecule of the probe molecules contained in the feature includes:

data that describes a biological molecule produced by synthesis directed by an immediate target molecule to which the probe molecules bind.

5. (Previously Presented)   The virtualizing microarray system of claim 2 wherein the data that describes the target molecule of the probe molecules contained in the feature further includes:

data describing molecular function;

data describing a biological process; and

data describing a cellular component.

6. (Previously Presented)   The virtualizing microarray system of claim 1 wherein the logic comprises:

logic that controls the microarray processing component to specify masks related to the data describing each feature of the microarray; and

logic that controls the microarray processing component to use the specified masks to filter the features of the microarray to produce the data describing a subset of the features of the microarray.

7. (Previously Presented)   The virtualizing microarray system of claim 1, wherein the microarray processing component is selected from one or more of:

a microarray scanner;

a microarray-data processing system; and

a microarray-data visualization system.

8. (Cancelled)

9. (Previously Presented)   The virtualizing microarray system of claim 1 wherein the microarray further includes a header, wherein the logic controls the microarray processing component to associate data describing each feature of the microarray with a microarray identified by information contained in the header.

10. (Previously Presented) The virtualizing microarray system of claim 7 wherein the microarray processing component is a microarray scanner.